

Sentence linkers in essays and papers by native vs. non-native writers

Radek Vogel

Masaryk University, Faculty of Education, Brno

Abstract

Sentence linkers rank among the principal cohesive devices in formal written texts. The paper analyses the distribution of the main categories of sentence linkers in essays written by advanced non-native users of English and compares the results with the variety and frequency of sentence linkers used in academic papers produced by native users. It tests the hypothesis that non-native writers are more inclined to overuse sentence linkers as an easy and ready-made tool to achieve cohesion of a text. Influence of teaching formulaic writing patterns is also discussed in the paper.

1. Cohesive devices in academic essays and papers

Academic writing manuals and similar guides to writing skills normally present a set of linguistic devices that contribute to reaching desirable qualities of good formal texts, notably objectivity, clarity, informality, logical progression, cohesion, etc. The two approaches usually used by such manuals are either providing inventory of such devices and illustrating their use, or making learners identify them in sample texts and classifying them into categories. Apart from the features characteristic of formal styles, such as a frequent use of passive forms, present simple tense to express general statements, neutral vocabulary, absence of expressive words, lack of personal pronouns, nominalisations, prevalence of content words etc., learners of English are also taught to use lexical and grammatical cohesion devices. They include particularly repetition of lexemes or relexicalisation by synonyms as the means of lexical cohesion, and ellipsis, substitution, co-reference of nouns with pronouns and use of logical connectors (or sentence linkers) as the principal devices of grammatical cohesion.

One of the aspects that help “to recognise a text as ‘academic’” is “the use of a clear and fairly predictable structure.” (Hamp-Lyons, Heasley 2006: 30) It is implied that a formal text structure can be simplified into an outline consisting almost invariably of the introduction, body (further subdivided into e.g. methods, results and discussion sections) and conclusion. Another type of logical organisation of an academic text is the S-P-S-E structure (i.e. Situation, Problem, Solution, Evaluation). (Ibid., 120) Unless a text is organised as a narrative, where the sequence of events is marked by verbal tenses, time indicators and time relaters (Ibid., 75-77), argumentative papers share the cohesive devices with descriptions of processes, namely the use of **sequence markers** (sequence connectors) and **connectives**.

Relative simplicity of the typical structure expressing a series of events marked by sequence markers *first / firstly / first of all – second/secondly – third/thirdly – next / after that / then – last/lastly/finally* etc. (cf. Hamp-Lyons, Heasley 2006: 90) seems to lead to overuse and overgeneralisation of such a pattern by non-native writers in the English academic style. Sequence markers are, however, just a subtype of a broader category of cohesive devices, termed variously, esp. logical connectors, connective or conjunctive adverbs, discourse markers, sentence linkers, conjuncts and disjuncts etc. (An extensive list of various labels was compiled by Hůlková 2006: 53-54.) Their ability to **mark unambiguously logical connections** between parts of a discourse, namely contrast, concession, result, inference, conclusion, as well as sequence mentioned above, combined with their frequently **prominent initial position** in sentences or paragraphs and a **relatively low number**, make these devices a convenient means of expressing clear logical relations within texts and utterances with dominantly referential function.

This paper draws on research using a sample of about 500-word essays written by Czech university students of English (as their major)¹ in a course where such formulaic patterns were not mentioned explicitly (viz. Practical and Professional English); however, an Academic Writing course was taught in the same semester. The results are checked against a random sample of academic papers by native speakers of English, published in proceedings of an international conference² focussed on teaching.

2. Linkers in essays by advanced non-native writers

The research was carried on a sample of 20 essays (about a third of the total) written by advanced users of English on topics related to teacher training and teaching methodology. This group was chosen to compile a non-native mini-corpus as it consists of graduate students who even use English daily in their mostly teaching jobs, i.e. they form the non-native (Czech) segment which is relatively closest to native speakers of English in terms of their proficiency.³

Cohesive devices listed and quantified in the below table include apparent discourse markers signalling **sequence of ideas** in the text and their **logical relationships**, namely conjunctive relations of the **additive**, **adversative**, **causal** and **temporal** types (where belong the above-mentioned sequential and conclusive adverbials). (Cf. Halliday, Hasan 1976:242) The principal syntactic characteristic was their initial sentence position; however, a few of them occurred in interclausal or even intraclausal positions. Conjunctions in coordinating and subordinating sentences were not included; the sought discourse markers were expected to

organise the text rather at a **suprasentential level**. On few occasions, inadequately used *but* and *and* in the initial positions were included in the survey (resulting from interference with Czech; *however*, *nevertheless*, and *moreover*, *additionally*, etc., would be preferred instead, respectively, by native writers). Sequential relations were sometimes expressed by the subjunct *also* or by paraphrases incorporating ordinal numerals in noun phrases; such constructions were mentioned in the table as well to show the alternatives.

Table 1. Linkers (disjuncts and conjuncts) and their position within paragraphs in essays written by non-native advanced users of English.

Para-graph	P _i (introductory paragraph)	P _{i+1}	P _{i+2}	P _{i+3}	P _{i+4}	P _{i+5}	P _{c-1}	P _c (concluding/final paragraph)
Essay								
E1	Yet (PM)	Firstly (PI)	Similarly (PM)	Finally (PM)	-	-	...also... Yet (PM) And, moreover (PM)	-
E2	Unfortunately (PM)	<i>One of ...</i>	Secondly (PI) Very generally speaking (PM) However (PM) Further (PM) Therefore (PM) As a result (PM)	Thirdly (PI) To begin with (PM) Further (PM) Apart from ... (PM) In addition (PM)	And yet (PI) In other words (PM) Furthermore (PM) Last but not least (PM)	-	-	In conclusion (PI)
E3	However (PM) Therefore (PM)	First of all (PI)	-	-	-	Finally (PI)	-	-
E4	However (PM)	First of all (PI)	In addition to it (PI)	Furthermore (PI)	On the top of that (PI)	On the other hand (PI)	-	To sum up (PI) ...and, more importantly, ... (PM, IC) ..., and thus ... (PM, IC)
E5	-	Firstly (PI) Unfortunately (PM)	Secondly (PI)	Thirdly (PI)	Fourthly (PI)	Fifthly (PI)	Finally (PI)	In conclusion (PI) However (PM)
E6	-	To begin with (PI)	I therefore (PI)	...also...	Then (PM)	-	-	But (PM)

			..., after all, ... (PM, IC)					
E7	Nevertheless (PM)	But on the other hand (PM)	First of all (PI) Therefore (PM) On the contrary (PM)	Secondly (PI) However (PM)	<i>Another...</i> <i>...also...</i> <i>...then...</i>	-	-	And (PM)
E8	-	<i>The main ...</i> However (PM) Last but not least (PM)	-	Thus (PM)	..., however, (PM, IC) Nevertheless (PM)	-	Last but not least (PI)	To sum it all up (PI)
E9	To start with (PI) Still (PM) Therefore (PM)	Unfortunately (PI) However (PM) Yet (PM)	Nevertheless (PM) After all (PM)	In any case (PM) However (PM)	-	-	-	To sum up (PI) Nonetheless (PM)
E10	But (PM)	However (PM)	However (PM)	-	First (PM)	Fortunately (PM)	Moreover (PM)	Due to this (PI) <i>...also...</i> <i>...also...</i>
(E11-E20)	(...)	(...)	(...)	(...)	(...)	(...)	(...)	(...)

Notes:

(PI) = *paragraph-initial*; initial position of a linker within a paragraph (adverbial disjuncts).⁴ Such instances are also marked by bold print.

(PM) = *paragraph-medial*; medial position of a linker within a paragraph, though initial in a sentence (adverbial disjuncts and conjuncts).

(IC) = *interclausal*; interclausal position of a linker, position within a sentence (a conjunct).

Findings of the analysis of all 20 essays in the mini-corpus are summarised in Table 2.

Table 2. Frequency of individual categories of linkers (disjuncts and conjuncts) within paragraphs in essays written by non-native advanced users of English.

Paragraph	P _i	P _{i+1}	P _{i+2}	P _{i+3}	P _{i+4}	P _{i+5}	P _{c-1}	P _c
Frequency (occur./total)								
	1/20 (5%) <i>To start with</i>	6/20 (30%) <i>First</i> <i>/Firstly</i> <i>/The first</i>	3/20 (15%) <i>The first</i> / <i>First of all</i>	2/20 (10%) <i>Thirdly</i>	2/20 (10%) <i>The third thing...</i> <i>/Fourthly</i>	-	3/20 (15%) <i>Finally</i> / <i>Last but not least/</i> <i>The last...</i>	1/20 (5%) <i>Finally</i>
	17/20 (85%) no specific beginning	2/20 (10%) <i>One of the main ...</i> / <i>The main ...</i>	3/20 (15%) <i>Secondly</i>	2/20 (10%) <i>Secondly</i>	8/20 (40%) <i>Furthermore/ The</i>	-	4/20 (20%) <i>Moreover</i>	8/20 (40%) <i>Overall</i> / <i>In conclusion</i> <i>/To conclude</i>

					<i>other.../ On the top of that /Another .../...also ...</i>		<i>/Another/ Yet; and moreover</i>	<i>/To sum up</i>
	2/20 (10%) subordinating conjunctions (<i>As soon as / When</i>)		7/20 (35%) <i>Moreover/ Similarly / Further (more) / and what is more</i>	5/20 (25%) <i>Further- more /Moreover/ In addition / Yet again</i>		-		

Table 1 displays a variety of patterns involving conjunctive devices and enables to draw several conclusions (Tab. 2). Whereas 85% of essays used no specific starters, the subsequent paragraph was signalled by **sequential adverbial** *first, firstly* etc. in 30% of essays. Another 30% and 25% of essays, respectively, applied additive linkers in the third and fourth paragraphs. **Adversative disjuncts** (*however, on the other hand*, etc.) seem to be distributed over the text quite equally, depending on where the contrast between some ideas is highlighted. **Summarising and conclusive adverbials** function as explicit discourse markers in 15% penultimate sentences, but in as many as 45% final ones.

3. Linkers in papers by native writers

The hypothesis prior to the research was that British and American native writers use considerably fewer explicit intersentential linkers, as they are capable of expressing the cohesive links by a variety of other ways, particularly lexically, structurally, by referential devices, etc. The analysis of 5 papers on similar topics (4 by British authors, 1 by an American; each approximately of twice or three times the length of those in the non-native sample) has proved this assumption, but it has also brought some surprising findings.

Table 3. Linkers (disjuncts and conjuncts) and their frequency in papers written by native speakers of English.

Papers ⁵	P1	P2	P3	P4	P5
Sentence linkers (occurrences)					
However	3	6	4	4	9
Thus	-	5	4	-	4

In addition / Additionally	1	2	1	-	2
So	-	4	-	-	2
Therefore	1	2	-	-	-
Nevertheless	-	1	-	-	1
As a result of	2	-	-	-	-
On the one/ other hand	-	1	-	-	1 / 1
Finally	-	-	-	-	2
Consequently	-	-	-	1	1
In particular / Specifically	-	1	1	-	1
Importantly	-	3	-	-	-
Interestingly	-	-	-	-	1
Basically / In short	-	-	-	-	1 / 1
Generally / After all	-	1	1	-	-
Indeed	-	-	1	-	-
For example	1	1	-	-	1
In other words	1	-	-	-	5

Note: Since the distribution of sentence linkers (namely causal, adversative and virtually absent sequence markers) did not reveal any dependence on the position in individual paragraphs of the papers, and since the number of paragraphs was higher than in students' essays in Table 1, a different format was chosen for Table 3.

None of the authors used sequential adverbials (*firstly, secondly*); these seem to be a favourite tool for non-native users of English. Few of them used conclusive or summarising adverbials either, though this fact might be distorted by the existence of subheadings in their papers, including the *Introduction* and *Conclusion*. Generally, there are **considerably fewer intersentential linkers** in these texts than in non-native essays. The surprising result is the **poor range** of used linkers: *however* is by far the most frequent, followed by *thus, in addition / additionally, so* and *therefore*.

4. Conclusion

Beside the expected higher frequency of intersentential cohesive devices, i.e. adverbial linkers, the non-native authors of formal essays display a markedly richer repertory of this type of discourse markers. Unlike the non-native users, speakers of English as 1st language avoid sequential and use a limited number of conclusive and summarising adverbial disjuncts, and their causal and adversative linkers in each analysed paper include just a few, usually the adversative *however* and the causal *thus, so* and *therefore*. Higher frequency and larger variety of sentence

linkers in formal texts written by non-native authors probably results from exposition to teaching a formulaic pattern of academic texts, provision of a repertory of categorised linkers, as well as from the comfort stemming from the use of explicit discourse markers.

Notes

- 1 Faculty of Education, Masaryk University in Brno, December 2007 - January 2008.
- 2 Fifth Annual International Conference on the Scholarship of Teaching and Learning (SoTL) 2005, 12-13 May 2005, and Sixth Annual International Conference on the Scholarship of Teaching and Learning (SoTL) 2006, 18-19 May 2006, both held at Goodenough College, London UK.
- 3 It is certain that comparison of British/US academics and Czech university teachers of English or British/US students of education and their Czech counterparts majoring in English would have been more convenient, but samples of texts in exactly identical genres were not available.
- 4 This classification of adverbial connectives draws on Greenbaum & Quirk (1990: 158-187).
- 5 P1 – Stephen Donohue, *Embedding Student Centred Learning in the University Sector: A Case Study* (Plymouth University, UK), pp. 129-132 (133).
P2 – Helen Johnson, *Beyond 'technicisation': the role of SoTL and Educational Development Centres in deepening and politicising the professional development of academics* (Kingston University, UK), pp. 280-287 (289).
P3 – Greg Kitzmiller, *Specifying Critical Thinking Skills in College Classes* (Indiana University, USA), pp. 134-136 (137).
P4 – Isabelle Marcoul, *Implementing Independent Learning with Different HE Boundaries* (City University, London, UK), pp. 351-356.
P5 – Mike Mortimer & Lyn Greaves, *Personal Stories and SOTL in a changing HE Landscape* (Thames Valley University, London, UK), pp. 57-66 (67).

References

- Fanghanel, J. & Warren, D. (Eds.) (2006). *International Conference on the Scholarship of Teaching and Learning: Proceedings 2005 and 2006*. London: Centre for Educational and Academic Practices.
- Greenbaum, S. & Quirk, R. *A Student's Grammar of the English Language*. Harlow: Pearson Education Limited, 1990.
- Halliday, M.A.K. & Hasan, R. (1976). *Cohesion in English*. Harlow: Pearson Education Limited.
- Hamp-Lyons, L. & Heasley, B. (2006). *Study writing: A course in writing skills for academic purposes*. Cambridge: Cambridge University Press.
- Hůlková, I. (2005). Linking devices in English academic prose. In Povolná, R. & Dontcheva-Navratilova, O. (Eds.). *Discourse and Interaction 1: Brno Seminar on Linguistic Studies in English (Proceedings)*. Brno: Masarykova univerzita.
- McCarthy, M. & Carter, R. (1994). *Language as Discourse: Perspectives for Language Teaching*. London & New York: Longman.
- Pirie, D.B. (1985). *How to write critical essays: a guide for students of literature*. London & New York: Routledge.